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Oliff & Berridge
PO Box 19928
Alexandria, VA 22320

EXAMINER

RAIZEN, DEBORAH A

ART UNIT PAPER NUMBER

2873

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,394

Applicant(s)

UENO, YASUNORI

Examiner

Deborah A. Raizen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 9 and 11-18 is/are rejected.
- 7) ☒ Claim(s) 4 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 15 April 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on April 15, 2002, have been approved (the correction of drawing sheet 13/14, Fig. 25). A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because it has more than 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Hagiwara et al. (5,790,232).

In regard to claim 14, Hagiwara discloses a method for manufacturing a spectacle lens (col. 5, line 50 to col. 7, line 40), involving the design and manufacture of left and right spectacle lenses that make up a pair of spectacles in which the prescription including diopter is different for the left and right eyes (col. 2, lines 19-23), wherein, if there is more than a specific amount of difference in the prescription including diopter between the left and right eyes (col. 5, lines 50-65; although explicit disclosure is only of a balancing process for a difference in the first refractive surfaces' dioptric powers, the balancing process is made necessary because of a corresponding difference in the total prescription): when the refractive surfaces in front of the left and right spectacle lenses are termed the first refractive surfaces and the refractive surfaces on the eye side are termed the second refractive surfaces, in designing the curvature of the curved surfaces of the first and second refractive surfaces of the left and right spectacle lenses, the curvature of the first and second refractive surfaces of at least one of the left and right spectacle lenses is selected so that the left and right spectacle lenses satisfy their respective

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prescription conditions including the diopter (col. 5, lines 21-22 and col. 6, lines 16; also, col. 3, lines 7-9) and so that the difference in the curvature of the first refractive surfaces between the left and right spectacle lenses falls within a specific range (col. 5, lines 54-65).

In regard to claim 16, in the Hagiwara method for manufacturing a spectacle lens, the difference in the diopter between the left and right eyes is 0.5 D or greater when the diopter prescription out of said prescription including the diopter includes a positive diopter, the difference in the diopter between the left and right eyes is 1 D or greater when the diopter prescription includes a negative diopter (a diopter difference of greater than 1 D, which would satisfy either case, is inherently disclosed because the difference in lens curve value [col. 5, lines 61-63] results from a difference in the diopter), and the difference in the curvature of the first refractive surfaces of the left and right spectacle lenses is no more than 1 D (col. 5, line 50 to col. 6, line 12).

5. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Shirayanagi (6,419,549).

6. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

7. Details of the disclosure of each of the limitations is omitted here because claims 1 and 3 are already rejected below on the basis of other references and because this rejection will likely be overcome by a translation of the earliest priority document.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagiwara et al. in view of Guirao et al. (6,511,180).

In regard to claim 1, Hagiwara discloses a spectacle lens supply method (col. 3, lines 20-34, and col. 7, line 41 to col. 8, line 25) in which a computer (transmitting device, col. 3, line 3, or computer 2, col. 7, line 47) is set up on a spectacle lens order side (side of transmitting data, col. 3, line 22, or optician's shop, col. 7, lines 46-47) and a computer (arithmetic device, col. 3, line 24, or main computer 4, col. 7, line 59) that is connected to this order-side computer such that information can be mutually exchanged (col. 3, line 25 and col. 7, lines 56-57 and 62-64) is provided on the manufacturer side (side of machining the spectacle lens, col. 3, line 26, or machining factory), and spectacle lenses are supplied by having the order-side computer and the manufacturer-side computer perform computations according to specific input operations (order-side: col. 7, lines 51-57: although only the input operations are explicitly disclosed here, a computer inherently performs some computations to handle input and online transferring of data; manufacturer-side: col. 7, lines 59-62) and perform the processing required for the taking and/or placing of orders for spectacle lenses while exchanging information with each other (col. 7, lines 51-67), characterized in that when spectacle lens information (col. 7, line 52), spectacle frame information (col. 7, line 54), prescription values (col. 7, line 52), layout information (col. 8, lines

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14-15), processing instructions information, and other such processing condition data required for processing (col. 7, lines 61-62: in order to “calculate a lens shape including a bevel edge shape,” “on the basis of the inputted data,” the inputted data must inherently include all processing condition data required for processing) is transmitted by the order-side computer to the manufacturer-side computer (col. 3, lines 27-30 and col. 7, lines 56-58), a lens design program installed on the manufacturer-side computer performs optical lens design tailored to the customer on the basis of the transmitted data for lens information (col. 7, lines 59-62), and the lenses are manufactured according to this design (col. 7, lines 25-40, and col. 7, line 66 to col. 8, line 25).

However, Hagiwara does not disclose that the optical performance of the left and right lenses will be similar as a result of the lens design. Guirao et al. discloses lens design that makes the optical performance of the left and right lenses similar (col. 14, lines 16-22). Furthermore, Guirao teaches that such “binocular balancing” has the advantage of improving depth of field by optimizing the visual correction over a range of distances (col. 14, lines 31-33). Therefore, it would have been obvious to one of ordinary skill in the art to use the Hagiwara method to make the optical performance of the left and right lenses similar because the resulting lenses would provide better depth of field, as taught by Guirao.

In regard to claim 2, in the Hagiwara spectacle lens supply method, the lens design program further performs optical lens design that approximates the left and right base curves to each other (col. 6, lines 7-10).

In regard to claim 5, in the Hagiwara spectacle lens supply method, the optical lens design is such that the difference in convex surface base curves of the left and right spectacle lenses is no more than 1 D (col. 5, line 50 to col. 6, line 12; "1.0-curve" refers to a difference of 1 D).

10. In regard to claim 6, in the Hagiwara spectacle lens supply method, a display means (col. 7, line 50 and col. 7, line 65) for comparing data including the lens shape before the curve matching (inherently disclosed because the method is disclosed to include selecting a lens blank having a determined lens curve [col. 7, lines 29-30], and the arithmetic result transferred [col. 7, lines 62-66] would only be meaningful if the lens blank, which has a lens shape before curve matching, were specified) and the prescription data for this lens (col. 7, line 52), to data including the lens shape after the curve matching and the prescription data for this lens (col. 7, lines 62-66: "arithmetic result" inherently includes lens shape and prescription data after curve matching because the main computer calculates lens shape [col. 7, lines 61-62]; in turn, the lens shape, along with the lens blank [the arithmetic result would only be meaningful if the lens blank were specified], inherently determine the prescription data because the power of a lens is determined by its shape and material), is transferred to and displayed at the computer set up on the side where spectacle lens is ordered (col. 7, lines 62-66).

11. Claims 1, 3, 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagiwara in view of Kitani (5,710,615).

In regard to claim 1, Hagiwara discloses a spectacle lens supply method that has the features of claim 1 (see the rejection of claim 1 as unpatentable over Hagiwara in view of Guirao above). However Hagiwara does not disclose that the optical performance of the left and right lenses will be similar as a result of the lens design. Kitani discloses lens design that makes the optical performance of the left and right lenses similar (col. 5, lines 30-34). Furthermore, Kitani teaches that making the astigmatism, a type of optical performance, of the left and right lenses similar prevents the wearer from feeling discomfort because of sensitivity to astigmatism (col. 5, lines 2-3). Therefore, it would have been obvious to one of ordinary skill in the art to use the Hagiwara method to make the optical performance of the left and right lenses similar because the resulting lenses would prevent wearer discomfort, as taught by Kitani.

12. In regard to claim 3, Kitani discloses that the optical performance consists of at least one of astigmatism, curvature of field, and distortion (col. 5, lines 30-34).

13. In regard to claim 15, Hagiwara discloses a method for manufacturing a spectacle lens (col. 5, line 50 to col. 7, line 40), involving the design and manufacture of left and right spectacle lenses that make up a pair of spectacles in which the prescription including diopter is different for the left and right eyes (col. 2, lines 19-23), wherein, if there is more than a specific amount of difference in the prescription including diopter between the left and right eyes (col. 5, lines 50-65; although explicit disclosure is only of a balancing process for a difference in the first refractive surfaces' dioptric powers, the balancing process is made necessary because of a corresponding difference in the total prescription): when the refractive surfaces in front of the

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left and right spectacle lenses are termed the first refractive surfaces and the refractive surfaces on the eye side are termed the second refractive surfaces, in designing the curvature of the curved surfaces of the first and second refractive surfaces of the left and right spectacle lenses, the curvature of the first and second refractive surfaces of at least one of the left and right spectacle lenses is selected so that the left and right spectacle lenses satisfy their respective prescription conditions including the diopter (col. 2, lines 22-23) and so that the difference in the curvature of the first refractive surfaces between the left and right spectacle lenses falls within a specific range (col. 5, line 50 to col. 6, line 12).

However, Hagiwara does not disclose that the optical performance of each lens falls within an acceptable range. Kitani discloses a method for manufacturing a spectacle lens that makes the astigmatism, a type of optical performance, fall within an acceptable range (col. 5, lines 30-34). Furthermore, Kitani teaches that keeping the astigmatism within an acceptable range prevents the wearer from feeling discomfort because of sensitivity to astigmatism (col. 5, lines 2-3). Therefore, it would have been obvious to one of ordinary skill in the art to select the curvature of the lenses in the Hagiwara method so that the optical performance of each lens falls within an acceptable range because it would prevent wearer discomfort, as taught by Kitani.

14. In regard to claim 17, Kitani discloses that the optical performance includes astigmatism (see the rejection of claim 15 above).

15. In regard to claim 18, Kitani disclose a method of manufacturing of lenses wherein the curvature of one or both of the first refractive surfaces is selected such that the surface is

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aspherical (col. 7, line 26; a cylindrical diopter is the result of aspherical (cylindrical) curvature). Furthermore, Kitani teaches that such an aspherical surface corrects astigmatism (through astigmatic power, col. 7, line 26). Therefore, it would have obvious to one of ordinary skill in the art to use the Hagiwara method, with the curvature of the lens surfaces selected so that the optical performance of each lens falls within an acceptable range as taught by Kitani, with the curvature of one or both of the first refractive surfaces further selected so that the surface is aspherical because the aspherical surface corrects astigmatism, as further taught by Kitani.

16. Claims 7, 9, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagiwara in view of Kitani and further in view of Kato et al. (6,199,983 B1).

17. In regard to claim 7, the Hagiwara spectacle lens supply system (col. 3, lines 20-34, and col. 7, line 41 to col. 8, line 25) comprises a computer (transmitting device, col. 3, line 3, or computer 2, col. 7, line 47) set up on a spectacle lens order side (side of transmitting data, col. 3, line 22, or optician's shop, col. 7, lines 46-47) and a manufacturer-side (side of machining the spectacle lens, col. 3, line 26, or machining factory) computer (arithmetic device, col. 3, line 24, or main computer 4, col. 7, line 59) that is information exchangeably connected to this order-side computer (col. 3, line 25 and col. 7, lines 56-57 and 62-64) and has a customer database including spectacle lens prescription data and lens design data (inherently disclosed because the manufacturer-side computer would have to store, at least temporarily, the prescription data and lens design data for a particular customer in order to perform its function, col. 7, lines 52 and 61-62; the set of data stored is a customer database), in which the order-side computer and the

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manufacturer-side computer perform computations according to specific input operations and perform the processing required for the taking and/or placing of orders for spectacle lenses while exchanging information with each other (col. 7, lines 51-67), wherein the manufacturer-side computer has the function of performing lens design (col. 7, lines 59-60), by selecting or producing new design data for a lens on the basis of customer spectacle lens processing condition data required for processing, such as spectacle lens information, spectacle frame information, prescription values, layout information, and processing instructions information, when this data is transmitted from the order-side computer to the manufacturer-side computer (col. 7, lines 51-62).

However, Hagiwara does not disclose making the optical performance of the new lenses produced with this new design data approximate the optical performance of the old lenses produced with the old design data based on the old prescription values of the pre-registered customer database such that a customer will experience substantially no discomfort originating in an optical performance difference when changing from old to new lenses. Kato et al. discloses a spectacle lens manufacturing method, which is included in a supply system, and which makes the optical performance of the new lenses produced with the new design data approximate the optical performance of the old lenses produced with the old design data based on the old prescription values of the pre-registered customer database such that a customer will experience substantially no discomfort originating in an optical performance difference when changing from old to new lenses (col. 18, lines 8-12). Furthermore, Kato teaches that matching the new optical performance to the old optical performance allows provision of the most appropriate spectacle lenses for each individual user's eyes (abstract) and satisfies the customer (col. 17, lines 63-64).

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Therefore, it would have been obvious to one of ordinary skill in the art to use the Hagiwara lens supply system to make the optical performance of the new lenses produced with the new design data approximate the optical performance of the old lenses produced with the old design data based on the old prescription values of the pre-registered customer database because doing so would satisfy the customer, as taught by Kato.

18. In regard to claim 9, in the Hagiwara spectacle lens supply system, the newly determined new design data is registered for the first time or updated in the customer database (all data inherently has to satisfy one of these limitations).

19. In regard to claim 11, in the Hagiwara spectacle lens supply system, the lens design data is such that the difference in the curve of a first refractive surface of the left and right spectacle lenses is no more than 1 D (col. 5, lines 54-65).

20. In regard to claim 12, Kitani discloses that the optical performance includes astigmatism. Furthermore, Kitani teaches that keeping the astigmatism within an acceptable range prevents the wearer from feeling discomfort because of sensitivity to astigmatism (col. 5, lines 2-3).

Therefore, it would have been obvious to one of ordinary skill in the art to select the curvature of the lenses in the Hagiwara method so that the astigmatism of each lens falls within an acceptable range because it would prevent wearer discomfort, as taught by Kitani.

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21. In regard to claim 13, Kitani discloses a method of manufacturing of lenses, included in a lens supply system, wherein the curvature of at least one of the first refractive surfaces of the left and right spectacle lenses is selected such that this curved surface will be aspherical (col. 7, line 26; a cylindrical diopter is the result of aspherical [cylindrical] curvature). Furthermore, Kitani teaches that such an aspherical surface corrects astigmatism (through astigmatic power, col. 7, line 26). Therefore, it would have obvious to one of ordinary skill in the art to use the Hagiwara lens supply system, with the curvature of the lens surfaces selected so that the optical performance of each lens falls within an acceptable range of difference from the old prescription, as taught by Kato, with the curvature of one or both of the first refractive surfaces further selected so that the surface is aspherical because the aspherical surface corrects astigmatism, as taught by Kitani.

Allowable Subject Matter

22. Claims 4 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of claims 4 and 10, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper.

The prior art fails to teach a combination of all the features in claim 4. For example, these features include the detailed steps of the method recited in claim 1 and also the steps that

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include performing lens redesign in which the convex surface curve of one lens is made to have an aspherical shape similar to that of the convex surface curve of the other lens so that the astigmatism is substantially the same

The prior art fails to teach a combination of all the features in claim 10. For example, these features include the detailed aspects of the system recited in claim 7 and also the limitation that, when there is old prescription data for a customer, if a difference that is not over 0.5 D is found from comparing the old and new prescription values, the new lens design data is selected without performing the optical performance comparison test.

23. Claim 8 is allowed.

The following is an examiner's statement of reasons for allowance: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of claim 8, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim 8. For example, these features include the details of putting the optical performance difference within the range in which the customer will experience substantially no discomfort originating in an optical performance difference when changing from old to new lenses.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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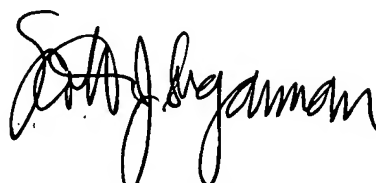
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah A. Raizen whose telephone number is (703) 305-7940. The examiner can normally be reached on Monday-Friday, from 8 a.m. to 4:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (703) 308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

dar
May 30, 2003


Scott J. Sugarman
Primary Examiner